

**INFORMATION
DISCLOSURE
STATEMENT**

Atty. Docket No.: 235.00540101

Serial No.: 10/579,090

Applicant(s): Duncan C. Ferguson

Confirmation No.: 5257

Application Filing Date: May 12, 2006

Group: 1761

Information Disclosure Statement mailed:

8 October 2007

U.S. PATENT DOCUMENTS

Examiner Initial	copy enclosed	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate

FOREIGN PATENT DOCUMENTS

Examiner Initial	Copy Enclosed	Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

Examiner Initial	copy enclosed	Document Description
	X	Barany and Merrifield (Gross and Meienhofer, Eds.) <i>The Peptides</i> Volume 2 Academic Press: City, State; 1980. Title page, publisher's page and table of contents only.
	X	Ben-Menaheh et al., "The position of the alpha and beta subunits in a single chain variant of human chorionic gonadotropin affects the heterodimeric interaction of the subunits and receptor-binding epitopes," <i>J. Biol. Chem.</i> , 2001; 276:29871-29879.
	X	Broome et al., "Predictive value of tracer studies for 131I treatment in hyperthyroid cats," <i>Am. J. Vet. Res.</i> , 1988; 49(2):193-197.
	X	Carter et al., "Humanization of an anti-p185HER2 antibody for human cancer therapy," <i>Proc. Nat'l Acad. Sci. USA</i> , 1992; 89:4285-4289.
	X	Chard et al., "Fluoroimmunoassay for human choriomammotropin," <i>Clinical Chemistry</i> , 1979; 25(6):973-975.
	X	Chin et al., "Nucleotide sequence of the mRNA encoding the pre-alpha-subunit of mouse thyrotropin," <i>Proc. Natl. Acad. Sci. USA</i> , 1981; 78:5329-5333.
	X	Clark-Lewis et al., "Chemical synthesis, purification, and folding of C-X-C and C-C chemokines," <i>Meth. Enzymol.</i> , 1997; 287:233-250.
	X	Coligan et al. (Eds.), "Chapter 9: Peptides" <i>Current Protocols in Immunology</i> , Volume 3. John Wiley & Sons, Inc: Somerset, NJ; 1991. Title page, publisher's page, and table of contents.

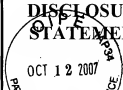
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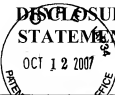
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	X	Coligan et al. (Eds.), "Chapter 2: Induction of Immune Responses (Section II 'Production of Antibodies' and Section III 'Purification and Fragmentation of Antibodies') " <i>Current Protocols in Immunology</i> , John Wiley & Sons, Inc: Somerset, NJ; 1991. Title page, publisher's page, table of contents, and sections 2.8.1-2.8.10 and 2.10.1-2.10.4.
	X	Crichton et al., "Efficacy of porcine gonadotropins for repeated stimulation of ovarian activity for oocyte retrieval and in vitro embryo production and cryopreservation in Siberian tigers (<i>Panthera tigris altaica</i>)," <i>Biol. Reprod.</i> , 2003; 68(1):105-113.
	X	Croyle et al., "Analysis of the organization and nucleotide sequence of the chromosomal gene for the beta-subunit of rat thyrotropin," <i>DNA</i> , 1986; 5:299-304.
	X	Erwin et al., "Nucleotide sequence of cloned complementary deoxyribonucleic acid for the alpha subunit of bovine pituitary glycoprotein hormones," <i>Biochemistry</i> , 1983; 22:4856-2860.
	X	Ferguson, "Early Detection of Hyperthyroidism," Meeting Abstract. Morris Animal Health Foundation: A Healthier Tomorrow for Animals 2001 Annual Meeting. Lake Tahoe, Nevada June 7-9, 2001. Available online [retrieved December 6, 2006]. Retrieved from the Internet: < http://web.archive.org/web/20011101225158/www.morrisanimalfoundation.org/feline_studies.html >; 6 pgs.
	X	Fiddes et al., "Isolation, cloning and sequence analysis of the cDNA of the alpha-subunit of human chorionic gonadotropin," <i>Nature</i> , 1979; 281:351-356.
	X	Gesundheit et al., "Mechanisms and regulation of TSH glycosilation," <i>Adv. Exp. Biol.</i> , 1986; 205:87-105.
	X	Gharib et al., "Molecular biology of the pituitary gonadotropins," <i>Endocrine Reviews</i> , 1990; 11:177-199.
	X	Godine et al., "α-Subunit of rat pituitary glycoprotein hormones. Primary structure of the precursor determined from the nucleotide sequence of cloned cDNAs," <i>J. Biol. Chem.</i> , 1982; 257:8368-8371.

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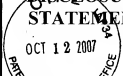
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	X	Graham et al., "The Measurement of Feline Thyrotropin (TSH) Using a Commercial Canine Immunoradio-Metric Assay," 18 th Annual ACVIM Forum: Abstract No. 59. Seattle, WA. May 25-28, 2000.
	X	Gram et al., "In vitro selection and affinity maturation of antibodies from a naive combinatorial immunoglobulin library," <i>Proc. Natl. Acad. Sci.</i> , 1992; 89:3576-3580.
	X	Green et al. (Manson ed.) "Production of Polyclonal Antisera" <i>Immunochemical Protocols</i> , Humana Press: Totowa, NJ; 1992. Title page, publisher's page, table of contents, and pp. 1-5.
	X	Green et al., "Antigen-specific human monoclonal antibodies from mice engineered with human Ig heavy and light chain YACs," <i>Nature Genet.</i> , 1994; 7:13-21.
	X	Harlow et al., <i>Antibodies: A Laboratory Manual</i> , Cold Spring Harbor Laboratory Press: Cold Spring Harbor, NY; 1988. Title page, publisher's page, table of contents and pp 319, 726.
	X	Hayashizaki et al., "Molecular cloning of the human thyrotropin-beta subunit gene," <i>FEBS Lett.</i> , 1985; 188:394-400.
	X	Hoenig et al., "Assessment of thyroid functional reserve in the cat by the thyrotropin-stimulation test," <i>Amer. J. Vet. Res.</i> , 1983; 44:1229-1232.
	X	Hollister et al., "Engineering lepidopteran insect cells for sialoglycoprotein production by genetic transformation with mammalian β -1,4-galactosyltransferase and α -2,6-sialyltransferase genes," <i>Glycobiology</i> , 2001; 11(1):1-9.
	X	Hollister et al., "Evidence for a sialic acid salvaging pathway in lepidopteran insect cells," <i>Glycobiology</i> , 2003; 13(6):487-495.
	X	Jones et al., "Replacing the complementarity-determining regions in a human antibody with those from a mouse," <i>Nature</i> , 1986; 321:522-525.
	X	Kay et al., <i>Phage display of peptides and proteins: A laboratory manual</i> , Academic Press: San Diego, CA; 1996. Title page, publisher's page, and table of contents.

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	X	Kermani et al., "Production of ScFv antibody fragments following immunization with a phage-displayed fusion protein and analysis of reactivity to surface-exposed epitopes of the protein F of <i>Pseudomonas aeruginosa</i> by cytofluorometry," <i>Hybridoma</i> , 1995; 14:323-328.
	X	Kohler et al., "Continuous cultures of fused cells secreting antibody of predefined specificity," <i>Nature</i> , 1975; 256:495-497.
	X	Laphorn et al., "Crystal structure of human chorionic gonadotropin," <i>Nature</i> , 1994; 369:455-461.
	X	Lonberg et al., "Antigen-specific human antibodies from mice comprising four distinct gene modifications," <i>Nature</i> , 1994; 368:856-859.
	X	Martin et al., "Evaluation of dietary and environmental risk factors for hyperthyroidism in cats," <i>J. Am Vet. Med. Assoc.</i> , 2000; 217(6):853-856.
	X	Maurer et al., "The sequence of a cloned cDNA for the beta subunit of bovine thyrotropin predicts a protein containing both NH ₂ - and COOH-terminal extensions," <i>J. Biol. Chem.</i> , 1984; 259:5024-5027.
	X	Mayer et al. (Eds.), <i>Immunochemical Methods in Cell and Molecular Biology</i> . Elsevier, Inc: New York, NY; 1987. Title page, publisher's page and table of contents only.
	X	Meienhofer et al. (Li, Ed.), <i>Hormonal Proteins and Peptides</i> , Academic Press: New York NY; 1973; Volume 2. Title page, publisher's page and table of contents only.
	X	Merrifield, "Solid Phase Peptide Synthesis. I. The Synthesis of a Tetrapeptide" 1963 <i>J. Am. Chem. Soc.</i> 85:2149.-2154.
	X	Merrifield, "Automated Synthesis of Peptides," 1965 <i>Science</i> 150(693):178-185.
	X	Merrifield, "Solid Phase Synthesis," 1986 <i>Science</i> 232(4787):341-347.
	X	Morrison, "Immunology: Success in Specification." 1994 <i>Nature</i> 368:812-813.

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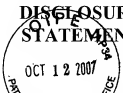
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	X	National Center for Biotechnology Information, National Library of Medicine, National Institutes of Health, GenPept Locus P54828, Accession No. P54828, "Thyrotropin subunit beta precursor (Thyroid-stimulating hormone subunit beta) (TSH-beta) (TSH-B) (Thyrotropin beta chain)," [online]. Bethesda, MD [retrieved on 2007-04-10]. Retrieved from the Internet: <http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=protein&val=1717805>; 3 pgs.
	X	O'Brien et al., "The cloning and expression of the alpha subunit of equine glycoprotein hormones," <i>Biochem. Soc. Trans.</i> , 1995; 23:347S.
	X	Olson et al., "Production of a biologically active variant form of recombinant human secretin," <i>Peptides</i> , 1988; 9:301-307.
	X	Orlandi et al., "Cloning immunoglobulin variable domains for expression by the polymerase chain reaction," <i>Proc. Nat'l. Acad. Sci. USA</i> , 1989; 86:3833-3837.
	X	Patel, "Glycoprotein Hormones: A Clapsed Embrace." 1994 <i>Nature</i> 369:438-439.
	X	Porter, "The hydrolysis of rabbit γ -globulin and antibodies with crystalline papain," <i>Biochem. J.</i> , 1959; 73:119-126.
	X	Rayalam, Srujana "Cloning, Expression, and Purification of Recombinant Feline Thyrotropin (fTSH): Effect of Glycosylation on Immunoreactivity." PhD Thesis: available October 9, 2006.
	X	Riechmann et al., "Reshaping human antibodies for therapy," <i>Nature</i> , 1988; 332:323-327.
	X	Sairam et al., "A role for glycosilation of the alpha subunit in transduction of biological signal in glycoprotein hormones," <i>Science</i> , 1985; 229:65-67.
	X	Sambrook et al., <i>Molecular Cloning: A Laboratory Manual</i> , 3 rd ed., Cold Spring Harbor Laboratory Press: Cold Spring Harbor, NY; 2001. Title page, publisher's page, and table of contents.
	X	Sandhu, "Protein engineering of antibodies," <i>Crit. Rev. Biotech.</i> , 1992; 12:437-462.

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	X	Sanna et al. "Directed selection of recombinant human monoclonal antibodies to herpes simplex virus glycoproteins form phage display libraries," <i>Proc. Natl. Acad. Sci.</i> , 1995; 92:6439-6443.
	X	Schmitz et al., "Phage display: a molecular tool for the generation of antibodies - a review," <i>Placenta</i> , 21 Suppl., 2000; S106-12.
	X	Seelan et al., "Structural organization and promoter analysis of the bovine cytochrome c oxidase subunit VIIc gene. A functional role for YY1," <i>J. Biol. Chem.</i> , 1997; 272:10175-10181.
	X	Singer et al., "Optimal humanization of 1B4, an anti-CD18 murine monoclonal antibody, is achieved by correct choice of human V-region framework sequences," <i>J. Immunol.</i> , 1993; 150:2844-2857.
	X	Stewart et al., <i>Solid Phase Peptide Synthesis</i> , W.H.Freeman Co., San Francisco, 1969. Title page, publisher's page and table of contents only.
	X	Studer et al., "Natural heterogeneity of thyroid cells: the basis for understanding thyroid function and nodular goiter growth," 1989 <i>Endocrine Rev.</i> , 10(2):125-135.
	X	Tatusova et al., "BLAST 2 Sequences, a new tool for comparing protein and nucleotide sequences," <i>FEMS Microbiol. Lett.</i> , 1999; 174:247-250.
	X	Taylor et al., "Human immunoglobulin transgenes undergo rearrangement, somatic mutation and class switching in mice that lack endogenous IgM," <i>Int. Immunol.</i> , 1994; 6:579-591.
	X	Tessier et al., "Enhanced secretion from insect cells of a foreign protein fused to the honeybee melittin signal peptide," <i>Gene</i> , 1991; 98(2):177-183.
	X	Thompson et al., "CLUSTAL W: Improving the sensitivity of progressive multiple sequence alignment through sequence weighting, position-specific gap penalties and weight matrix choice," <i>Nucl. Acids Res.</i> , 1994; 22:4673-4680.
	X	Thotakura et al., "Structure-function studies of oligosaccharides of recombinant human thyrotropin by sequential deglycosylation and resialylation," <i>Glycobiology</i> , 1994; 4:525-533.
	X	Thotakura et al., "Glycoprotein hormones: glycobiology of gonadotropins, thyrotropin and free alpha subunit," <i>Glycobiology</i> , 1995; 5:3-10.

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	X	Verhoeyen et al., "Reshaping human antibodies: grafting an antilysozyme activity," <i>Science</i> , 1988; 239:1534-1536.
	X	Ward et al. (Committee on Methods of Producing Monoclonal Antibodies) <i>Monoclonal Antibody Production</i> , Institute for Laboratory Animal Research, National Research Council, The National Academy Press: Washington, D.C.; 1999. Title page, publisher's pgs., preface, and table of contents.
	X	Williams et al., "Validation of an immunoassay for canine thyroid-stimulating hormone and changes in serum concentration following induction of hypothyroidism in dogs," <i>J. Am. Vet. Med. Assoc.</i> , 1996; 209:1730-1732.
	X	Wolf et al., "Expression of the gene for the beta subunit of mouse thyrotropin results in multiple mRNAs differing in their 5'-untranslated regions," <i>J. Biol. Chem.</i> , 1987; 262:16596-16603.
	X	Wondisford et al., "Isolation and characterization of the human thyrotropin beta-subunit gene. Differences in gene structure and promoter function from murine species," <i>J. Biol. Chem.</i> , 1988; 263:12538-12542.
	X	Yang, "Cloning of canine, equine and ovine thyrotropin genes and production of recombinant canine thyrotropin," University of Georgia, PhD Thesis: available July 29, 1997.
	X	Yang et al., "Canine thyrotropin beta-subunit gene: cloning and expression in <i>Escherichia coli</i> , generation of monoclonal antibodies, and transient expression in the Chinese hamster ovary cells," <i>Domestic Animal Endocrinology</i> , 2000; 18(4):363-78.
	X	Yang et al., "cDNA cloning of canine common alpha gene and its co-expression with canine thyrotropin beta gene in baculovirus expression system," <i>Domestic Animal Endocrinology</i> , 2000; 18(4):379-93.
	X	Zerfaoui et al., "Glycosylation is the structural basis for changes in polymorphism and immunoreactivity of pituitary glycoprotein hormones," <i>Eur. J. Clin. Chem and Clin. Biochem.</i> , 1996; 34:749-753.

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